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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/069,636	08/05/2002	Rainer Kiefer	WSP: 204-US	3353

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5555 Main Street
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EXAMINER

HEPPERLE, STEPHEN M

ART UNIT	PAPER NUMBER
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3753

DATE MAILED: 12/24/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/069,636

Applicant(s)

KIEFER, RAINER

Examiner

Stephen M. Hepperle

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 20-39 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 20-39 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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The proposed drawing correction filed 27 October 2003 has been approved.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 20-25 and 34-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over George or Pasternack. George shows a pressure cylinder valve with external valve 64 and a fill valve 102 that has always open restriction path 96a, 96b, for outflow of fluid. Pasternak shows a pressure cylinder valve with external valve 6 and a fill valve 27 that has always open restriction path 18, 22 for outflow of fluid. These restriction paths are always independent of the check valve opening. The references do not state the amount of resistance provided, but it would have been obvious to one of ordinary skill in the art to size the restriction such that a desired pressure drop occurs at a desired flow rate. Regarding claims 35-36, both references provide "an attachment portion" to connect to a pressure tank.

Claims 20-23, and 26-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Platt. Platt shows a pressure cylinder with a discharge valve assembly inserted into and mated to the tank 10, including a discharge valve 20 and a porous/sintered flow resistance 24. The plastic resistor has an average pore diameter of less than 10 micrometers (claim 28) and an average porosity of 10-50% (claims 29-30). It would have been obvious to one of ordinary skill in the art to size the restriction such that a desired pressure drop occurs at a desired flow rate.

Claims 35 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mays (DE 2406313). Mays shows a discharge valve arrangement 4 where the threads at the top are the

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same as at the bottom. It would have been obvious to size restrictor 11 for any desired flow rate, as such is within the ordinary skill of those working in the art.

Claims 37-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pasternack. Pasternack shows an attachment portion (threads 9) that screw into female threads in the tank.

Claims 31-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pasternack in view of Szwargulski. Szwargulski shows a sintered check valve 14 for the purpose of allowing some fluid to pass when the valve is closed. It would have been obvious in view of Szwargulski to make the Pasternack valve 20 of sintered material to eliminate the need for a separate drilled passage 22 and the extra machining thus required.

Applicant's arguments filed 27 October 2001 have been fully considered but they are not persuasive. Applicant's principle argument is that the flow passage of prior art does not teach causing a pressure drop of at least 1 bar at a flow rate of .5 g/s. First, applicant does not recite any particular structural limitations to provide what is at best, merely a desired result. Second, it is well within the ability of one having ordinary skill in the art to size the applied references (or add a restrictor, if preferred) to achieve any desired pressure drop through the device. At a certain given size of the overall device, each of the references will also provide applicant's desired result. It is because the means to accomplish this flow/pressure drop is so well known that the examiner did not reject the claim under 35 USC 112 for claiming a result without specific structural support. It should also be noted that Pasternak and George specifically teach restricting the discharge flow path. It is not seen as relevant if they do so for reasons different from applicant.

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Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen M. Hepperle whose telephone number is 703-308-1051. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Scherbel can be reached on 703-308-1272. The fax phone number for the organization where this application or proceeding is assigned is 703-308-7765.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0861.


Stephen M. Hepperle
Primary Examiner
Art Unit 3753

SMH